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September 20, 2010

David Libman
National Park Service Southeast Region
Atlanta Federal Center
1924 Building
100 Alabama Street, S.W.
Atlanta, Georgia 30303

SUBJECT: Final General Management Plan/Environmental Impact Statement for the Cumberland Gap National Historical Park
FES 10-32
CEQ Number 20100321

Dear Mr. Libman:

The U.S. Environmental Protection Agency (EPA) has reviewed the referenced Final General Management Plan/Environmental Impact Statement in accordance with its responsibilities under Section 309 of the Clean Air Act and Section 102(2)(C) of the National Environmental Policy Act. The purpose of this general management plan and Final EIS (FEIS) is to present a plan for managing the Cumberland Gap National Historical Park (CGNHP) in Middlesboro, Kentucky, for the next 15 to 20 years. The National Park Service (NPS) is the lead federal agency for the proposed action.

General management plans represent the broadest level of planning conducted by the NPS and are intended to provide overall guidance for making informed decisions about future conditions in national parks. The FEIS assesses the environmental impacts of three alternatives (A, B, & C) in terms of levels of service for visitor interpretation and education in the CGNHP, suitable locations for administration and visitor facilities, and management of the CGNHP to allow for preservation of natural and cultural resources. Alternative A is the no action alternative, continuation of present management practices. Alternative B would provide opportunities for enhanced visitor access by providing additional park facilities. Alternative C is identified as the NPS preferred alternative and is similar to Alternative B. However, it would also provide additional park facilities, increased levels of education, outreach, and formalized partnering efforts.

The concept of Alternative C is to provide greater opportunities for visitor access and

facilities in the park. This would be achieved primarily by having larger developed zones than the other alternatives. The total area of the developed zone in Alternative C would be over twice as large as the development zone in Alternative A, the no action alternative. Therefore, Alternative C would have a greater relative amount of land disturbing activity, as compared to the other alternatives, due to an increase in "hardened" types of access (e.g., parking areas, roads, and camping areas) and development of support facilities. However, the numbers and types of new facilities would be limited to protect natural and cultural resources in the park. New facilities would be proposed within the context of their location within the management zone. Sustainable designs and practices would be implemented wherever possible, and new facilities would be unobtrusive.

A number of mitigation measures are proposed in the FEIS to avoid or minimize potentially adverse impacts from implementation of the new management plan and to ensure that the park's natural and cultural resources are protected and preserved for future visitors. EPA supports inclusion of these mitigation measures as part of the new general management plan for CGNHP, particularly the commitment to develop a resource stewardship strategy, including an updated cave management plan. EPA recommends that these programs include significant monitoring activities to ensure that the increase in hardened access areas and likely subsequent increase in recreational and educational usage of the park do not negatively impact natural and cultural resources. This is especially true for the expansion of the developed zone adjacent to Fern Lake, which is a designated public water-supply reservoir.

In the spirit of collaboration and technical assistance the EPA recommends some sustainability concepts which could be considered in the management plan.

Green Building

Green building is the practice of creating structures and using processes that are environmentally responsible and resource-efficient throughout a building's life-cycle from design to, construction, operation, maintenance, renovation and deconstruction. This practice expands and complements the classical building design concerns of economy, utility, durability, and comfort. Green building is also known as a sustainable or high performance building.

Green buildings are designed to reduce the overall impact of the built environment on human health and the natural environment by:

- Efficiently using energy, water, and other resources
- Protecting occupant health and improving employee productivity
- Reducing waste, pollution and environmental degradation

For example, green buildings may incorporate sustainable materials in their construction (e.g., reused, recycled-content, or made from renewable resources); create healthy indoor environments with minimal pollutants (e.g., reduced product emissions); and/or feature landscaping that reduces water usage (e.g., by using native plants that survive without extra watering).

In the United States, buildings account for:

- 39 percent of total energy use
- 12 percent of the total water consumption
- 68 percent of total electricity consumption
- 38 percent of the carbon dioxide emissions

Potential benefits of green building can include:

Environmental benefits

Enhance and protect biodiversity and ecosystems
Improve air and water quality
Reduce waste streams
Conserve and restore natural resources

Economic benefits

Reduce operating costs
Create, expand, and shape markets for green product and services
Improve occupant productivity
Optimize life-cycle economic performance

Social benefits

Enhance occupant comfort and health
Heighten aesthetic qualities
Minimize strain on local infrastructure

For more information on Green Building please visit: http://www.epa.gov/greenbuilding/

Green Parking

Green parking refers to several techniques that when applied together reduce the contribution of parking lots to total impervious cover. From a storm water perspective, green parking techniques applied in the right combination can dramatically reduce impervious cover and, consequently, reduce the amount of storm water runoff. Green parking lot techniques include: setting minimums of permanent parking spaces; minimizing the dimensions of parking lot spaces; utilizing alternative pavers in overflow parking areas; using bioretention areas to treat storm water; encouraging shared parking.

Green parking lots can dramatically reduce the creation of new impervious cover. How much is reduced depends on the combination of techniques used to achieve the greenest parking. While the pollutant removal rates of bioretention areas have not been directly measured, their capability is considered comparable to a dry swale, which removes 91 percent of total suspended solids, 67 percent of total phosphorous, 92 percent of total nitrogen, and 80-90 percent of metals (Claytor and Schueler, 1996).

North Carolina's Fort Bragg vehicle maintenance facility parking lot is an excellent example of the benefits of rethinking parking lot design (NRDC, 1999). The redesign incorporated storm water management features, such as detention basins located within grassed islands, and an onsite drainage system that exploited existing sandy soils. The redesign reduced impervious cover by 40 percent, increased parking by 20 percent, and saved 20 percent or $1.6 million on construction costs over the original, conventional design.

For more information on Green Parking please visit:

http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm?action=factsheet_results&view=specific&bmp=89

Briefly three other sustainable activities which may applicable to the Park Service's general management plan are as follows:

- **Green Detention Ponds**
- **Rain Water Harvesting**
- **Rain Gardens**

Information about these three activities can be easily found on the web.

We rate this document LO (Lack of Objections). EPA lacks objections to the General Management Plan and supports Alternative C which is identified as the NPS preferred alternative. All mitigation measures and monitoring programs, as described in the FEIS and including the above recommendations, should be fully implemented. We appreciate the opportunity to review the proposed action. Please contact Ken Clark of my staff at (404) 562-8282 if you have any questions or want to discuss our comments further.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office
Office of Policy and Management